

What is claimed is:

1. A fitting for an end of a length of tubing having corrugations ranging between a maximum diameter and a minimum diameter, the fitting comprising:
  - a retainer having at least one ridge sized to extend inwardly to a radius between said maximum and minimum diameters for gripping the tubing axially above an endmost corrugation of the tubing;
  - a body having a hollow cylindrical part sized to admit the retainer, the body having at least one threaded surface;
  - a nut having a thread complementary with the threaded surface of the body, the nut having a cap part configured to engage the retainer for urging the retainer axially into the body with threaded advance of the nut relative to the body;
  - wherein the body has an inwardly tapered conical surface with a circular outer radius surrounded by an annular groove, and wherein the edge is disposed between said maximum and minimum diameters, whereby advance of the nut on the body turns the endmost corrugation over said edge.
2. The fitting of claim 1, further comprising a gasket disposed in the annular groove, the gasket sealing against a radially outer part of the endmost corrugation.
3. The fitting of claim 2, wherein the edge is configured to form the endmost corrugation into a bead adjacent to the maximum diameter, and wherein the bead compresses the gasket.
4. The fitting of claim 2, wherein the gasket comprises a high temperature gasket material.
5. The fitting of claim 1, wherein the fitting body has a second threaded surface bearing a pipe thread.
6. The fitting of claim 1, wherein the ridge of the retainer is circumferentially split to enable engagement over the maximum diameter.

7. The fitting of claim 6, wherein the retainer comprises a plurality of ridges that are complementary with the corrugations of the tubing, and a flanged part that is positioned for engagement with a flanged part of the nut.

8. The fitting of claim 1, wherein the conical surface of the fitting and the annular groove form a triangular cross section with a radially sloped side and a longitudinal side forming a right triangle.

9. The fitting of claim 1, wherein the edge is placed to fall between 40% and 60% of a radial distance between the maximum and minimum diameters.

10. The fitting of claim 1, wherein the edge is placed to fall substantially at a midpoint between the maximum and minimum diameters.

11. A coupling for carrying a fluid, comprising:  
a length of tubing having corrugations ranging between a maximum diameter and a minimum diameter;  
a retainer having at least one ridge sized to extend inwardly to a radius between said maximum and minimum diameters for gripping the tubing axially above an endmost corrugation of the tubing;  
a body having a hollow cylindrical part sized to admit the retainer, the body having at least one threaded surface;  
a nut having a thread complementary with the threaded surface of the body, the nut having a cap part configured to engage the retainer for urging the retainer axially into the body with threaded advance of the nut relative to the body;  
wherein the body has an inwardly tapered conical surface with a circular outer radius surrounded by an annular groove, and wherein the edge is disposed between said maximum and minimum diameters, whereby advance of the nut on the body turns the endmost corrugation over said edge.

12. The coupling of claim 11, further comprising a gasket disposed in the annular groove, the gasket sealing against a radially outer part of the endmost corrugation.

13. The coupling of claim 2, wherein the edge is configured to form the endmost corrugation into a bead adjacent to the maximum diameter, and wherein the bead compresses the gasket.

14. The coupling of claim 11, wherein the ridge of the retainer is circumferentially split to enable engagement over the maximum diameter.

15. The coupling of claim 14, wherein the retainer comprises a plurality of ridges that are complementary with the corrugations of the tubing, and a flanged part that is positioned for engagement with a flanged part of the nut.

16. The coupling of claim 11, wherein the conical surface of the fitting and the annular groove form a triangular cross section with a radially sloped side and a longitudinal side forming a right triangle.

17. The coupling of claim 11, wherein the edge is placed to fall between 40% and 60% of a radial distance between the maximum and minimum diameters.

18. A method of terminating a length of corrugated tubing comprising the steps of:

cutting the tubing at a longitudinal point spaced between maximum diameter points of adjacent corrugations;

engaging the tubing in a retainer having a ridge placed axially behind at least an endmost corrugation of the tubing;

forcing the endmost corrugation axially against an inwardly conical surface having an edge surrounded by an annular groove, the edge being disposed between the maximum and minimum diameters, thereby folding the endmost corrugation over the edge to provide a circular sealing junction between the retainer and the edge.

19. The method of claim 18, further comprising spacing the edge radially inwardly from the maximum diameter and forming a bead in the endmost corrugation radially outside the circular sealing junction.

20. The method of claim 19, further comprising forming a supplemental seal with the bead by placing a gasket in the annular groove, the gasket being compressed by the bead.